

Amendments to the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

1. (Currently Amended) A process for the preparation of fludarabine phosphate starting from fludarabine, wherein said fludarabine is not anhydrous, comprising the following steps: (a) the reacting fludarabine ~~is caused to react~~ with a short-chain trialkyl phosphate and phosphorus oxychloride at a temperature of ~~less than -5° C.~~ -5 to -15° C ~~to form a mixture~~; (b) adding an aprotic non-polar organic solvent ~~is added~~ to the mixture so obtained with consequent precipitation of the fludarabine phosphate.
2. (Original) A process according to claim 1, characterized in that the starting fludarabine has a water content, measured in accordance with the Karl Fischer (K.F). method, of not more than 0.5%.
3. (Original) A process according to claim 1, characterized in that the short-chain trialkyl phosphate is a compound of the formula  $(RO)_3PO$  wherein R is an alkyl radical having from 1 to 4 carbon atoms.
4. (Currently Amended) A process according to claim 1, characterized in that the trialkyl phosphate is selected from trimethyl phosphate and triethyl phosphate, ~~preferably triethyl-phosphate~~.
5. (Currently Amended) A process according to claim 1, characterized in that the trialkyl phosphate is used in an amount of from 5 to 8 moles, ~~preferably from 6 to 7 moles~~, per mole of fludarabine.
6. (Currently Amended) A process according to claim 5, characterized in that the phosphorus oxychloride is used in an amount of from 1 to 4 moles, ~~preferably from 2 to 3 moles~~, per mole of fludarabine.
7. (Original) A process according to claim 1, characterized in that the aprotic non-polar organic solvent is a hydrocarbon solvent.

8. (Original) A process according to claim 7, characterized in that the aprotic non-polar organic solvent is toluene.
9. (Currently Amended) A process according to claim 1, characterized in that the aprotic non-polar organic solvent is added at a temperature of ~~less than -5°C~~ -10 to -15°C.
10. (Currently Amended) A process according to claim 1, characterized in that the aprotic non-polar organic solvent is used in an amount of from 50 to 150 moles; ~~preferably in an amount of from 100 to 110 moles,~~ per mole of fludarabine.
11. (Currently Amended) A process according to claim 1, characterized in that it is carried out at a temperature of ~~less than -10°C,~~ preferably at a temperature of from -10 to -15°C.
12. (New) A process according to claim 1, characterized in that the trialkyl phosphate is triethyl phosphate.
13. (New) A process according to claim 1, characterized in that the trialkyl phosphate is used in an amount of from 6 to 7 moles per mole of fludarabine.
14. (New) A process according to claim 5, characterized in that the phosphorus oxychloride is used in an amount of from 2 to 3 moles per mole of fludarabine.
15. (New) A process according to claim 1, characterized in that the aprotic non-polar organic solvent is used in an amount of from 100 to 110 moles per mole of fludarabine.